



Australian Government

MARM004 Work in the marine surveying sector

Release: 1

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Modification History

Release 1. New unit of competency.

Application

This unit involves the skills and knowledge required to work in the marine surveying sector. It includes identifying and accessing relevant industry standards and regulations for conducting surveys of domestic commercial vessels. It also looks at the role and legal responsibilities of a marine surveyor for domestic commercial vessels, the survey task and the statutory requirements for surveying commercial vessels.

This unit applies to people who assist marine surveyors or who undertake administration duties in the maritime industry and/or marine surveying sector.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

M – Marine Surveying

Unit Sector

Not applicable.

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Scope framework for marine surveys	1.1	International and national authorities that govern the maritime industry are identified
	1.2	Standards, legislation and regulations applicable to marine surveyor and marine surveying tasks for commercial vessels are identified and accessed
	1.3	Standards, legislation and regulations applicable to marine environment protection and its relation to marine surveys and inspections are identified and accessed

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| | 1.4 | Range of clients and stakeholders who would require marine surveyor and/or inspector services are identified and recorded |
| | 1.5 | Legal standing of marine survey report is explained |
| | 1.6 | Legal and/or financial implications for inaccurate reporting of marine survey are explained |
| 2 Clarify areas of responsibility for marine surveyors | 2.1 | Range of services provided by marine surveyors is outlined |
| | 2.2 | International and national conventions, laws and codes of practice that govern and regulate marine surveys of commercial vessels are identified |
| | 2.3 | Behavioural characteristics, ethics and personal conduct required of a marine surveyor are explained |
| 3 Determine requirements for conducting commercial vessel survey | 3.1 | Different types of marine surveyors and their roles are accurately defined |
| | 3.2 | Terms ‘survey’ and ‘audit’ are accurately explained in relation to commercial vessel survey |
| | 3.3 | Purpose and range of commercial vessel survey is accurately outlined |
| 4 Scope survey process under supervision | 4.1 | Objectives, principal work activities, costs and constraints are identified and explained |
| | 4.2 | Relevant standards, legislation and regulations are defined in relation to conducting commercial vessel marine surveys |
| | 4.3 | Procedures and processes for collecting information when conducting a survey are outlined |
| | 4.4 | Importance of communicating with others is explained and implemented |
| | 4.5 | Tools and equipment required to conduct a range of different marine surveys are identified |
| | 4.6 | Relevant survey and supporting documents related to type of survey are identified and accessed |
| | 4.7 | Process of gathering relevant information through observation is outlined |
| | 4.8 | Importance of accurate recording of information and events |

		during and after a survey is explained
	4.9	Requirements for use of verified factual information when making recommendations are identified
5 Identify scope of surveyor behavioural conduct and ethics	5.1	Behavioural characteristics and personal conduct required of a marine surveyor are outlined
	5.2	Conflicts of interest and other vested interests that would affect survey outcome and/or report are identified and resolved with surveyor
	5.3	Strategies to deal effectively with conflicts of interest are applied
	5.4	Risks related to possible confrontations and need for effective risk management techniques are identified and discussed with surveyor
6 Outline requirements of an effective survey report	6.1	Appropriate formats for a range of different survey reports are identified
	6.2	Means of presenting survey report to a range of stakeholders are explained
	6.3	Reports are reviewed by relevant personnel and achievement of document objectives and requirements are outlined
	6.4	Security of information and privacy requirements are identified

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

- Authorities must include:
- Australian Maritime Safety Authority (AMSA) and AMSA delegates
 - workplace and/or industry health and safety committees

Standards include one or more of the following:	• National Standard for the Administration of Marine Safety (NSAMS) • NSCV/USL Code • work health and safety/occupational health and safety (WHS/OHS) standards
Legislation includes one or more of the following:	• government legislation and regulations relating to: • environmental protection • maritime • international legislation/codes of behaviour • Marine Safety (Domestic Commercial Vessel) National Law • Navigation Act • WHS/OHS legislation, regulations, codes of practice
International and national conventions, laws and codes of practice include one or more of the following:	• international convention: • collision regulations • load lines • maritime labour convention (MLC) • MARPOL • SOLAS • Standards of Training Certification and Watchkeeping (STCW) • relevant maritime legislation and regulations • relevant WHS/OHS legislation and policies
Types of marine surveyors include one or more of the following:	• classification society (class) • government (statutory) • independent (private) • insurance company
Purpose and range of commercial vessel survey includes one or more of the following:	• damage or accident, survey or investigation assistance • fitness of vessel and/or crew for its purpose • MLC • vessel related surveys for: • compass adjustment • radio surveys • hull/machinery/safety equipment • load line
Costs include one or more of the following:	• associated costs such as travel, accommodation • conducting the survey • preparation time for the survey • writing the survey
Constraints include one or	• geographical

more of the following:	• inclement weather • legal • timeframes • WHS/OHS risks
Processes for collecting information include one or more of the following:	• gathering relevant facts • maintaining case files • observing • obtaining linear measurement • reviewing supporting documentation • sampling • specimen collection • taking photographs
Communicating includes one or more of the following:	• active listening • constructive feedback • control of tone of voice • questioning to clarify and confirm understanding • using language and concepts appropriate to the individual • using open and enquiring questions • using positive, confident and cooperative language • verbal and non-verbal language
Tools and equipment include one or more of the following:	• business technology, internet connection, sounding tapes • communication equipment • drill, hammer/welder's hammer, draft survey hydrometer, screw driver • entry authority • hydrometer, thermometers, scraper • labels, plastic sampling bags, sampling equipment • mirror, small mallet • notebook • personal protective equipment (respirators, gloves, overalls, boots, hearing protection, goggles, masks) • recording equipment, Dictaphone, camera, mobile phone, pocket calculator • satellite imagery, photographs • storage equipment/facilities • tape measure/measuring wheel
Survey documents include one or more of the following:	• checklists • guidelines • relevant legislation and extracts from standards
Supporting documents	• case files/incident reports

include one or more of the following:

- certificates of survey, operation, registration
- commercial documentation
- deck and engine logs
- forms (such as application forms, notification forms)
- nautical charts and publications
- notices (such as seizure notice, infringement notice)
- operating manuals and owner instructions
- plans
- previous surveys
- safety management system
- ship log books and other recordkeeping instruments
- vessel stability book
- voyage details, stow plans and manifest

Relevant personnel must include:

- crew
- manager of private survey company
- owners or owner representatives of vessels and/or charters
- port authorities
- representatives of:
 - classification societies
 - government
 - law firm
 - protection and indemnity clubs
- salvage associations
- stevedores
- work colleagues

Unit Mapping Information

This unit replaces and is equivalent to MARM3004A Work in the marine surveying sector.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=772efb7b-4cce-47fe-9bbd-ee3b1d1eb4c2>

Assessment Requirements for MARM004 Work in the marine surveying sector

Modification History

Release 1. New unit of competency.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions on at least one occasion and include:

- accessing current legislation, marine orders, standards and information relevant to marine surveying sector
- accurately completing relevant documentation and reports within own scope of responsibility
- accurately operating technical and electronic equipment
- applying relevant work health and safety/occupational health and safety (WHS/OHS) requirements and work practices
- communicating effectively verbally and in writing
- developing a rapport with colleagues and people external to the organisation
- effectively liaising with internal and external authorities and/or agencies
- ensuring currency of relevant legislative and regulatory knowledge
- identifying and applying appropriate conduct and ethical behaviour
- resolving conflict
- using a range of communication techniques such as establishing rapport, listening, probing, reflecting, negotiation, conflict resolution.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions and include knowledge of:

- domestic commercial vessel operations
- effective listening and communication techniques
- equal employment opportunity, equity and diversity principles
- government legislation and regulations relating to:
 - accepted codes of behaviour/codes of practice
 - combined Uniform Shipping Laws (USL) Code and National Standard for Commercial Vessels (NSCV)
 - environmental protection

- load lines
- Marine Safety (Domestic Commercial Vessel) National Law
- International Convention for the Prevention of Pollution from Ships (MARPOL) and safety of life at sea (SOLAS) and how they apply to survey tasks
- WHS/OHS
- IMO Conventions and Codes, including Australian Maritime Safety Authority (AMSA) Marine Orders and how they apply to survey purpose
- industry specific codes of conduct and ethics
- legal requirements relating to recording, security and privacy of information
- organisational policies and guidelines relating to interviews and information gathering prior to and during the survey
- range of different survey types for commercial vessels
- reporting requirements including appropriate format and content
- risks related to marine surveying tasks
- role of surveyor
- statutory survey schedules
- tools required for different survey types.

Assessment Conditions

Assessors must satisfy National Vocational Education and Training Regulator (NVR)/Australian Quality Training Framework (AQTF) assessor requirements.

Assessment must satisfy the National Vocational Education and Training Regulator (NVR)/Australian Quality Training Framework (AQTF) standards.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Assessment must occur in workplace operational situations or where these are not available, in simulated workplace operational situations or an industry-approved marine operations site that replicates workplace conditions.

Resources for assessment include access to:

- relevant documentation including workplace procedures, regulations, codes of practice and operation manuals
- tools, equipment, materials and personal protective equipment currently used in industry when conducting commercial vessel survey

Performance should be demonstrated consistently over time and in a suitable range of contexts.

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